

AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Application No.: 10/516,455

Attorney Docket No. Q84452

**REMARKS**

**Status of the Application**

Claims 1-4 are the claims currently pending in the instant application. Claims 5-10 have been withdrawn from consideration and are hereby canceled without prejudice or disclaimer. Thus, claims 1-4 are the claims that have been examined on the merits. Claims 3 and 4 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,796 issued to Gupta et al. (hereinafter Gupta).

By this Amendment, Applicant is amending claims 3 and 4.

**Claim Rejections - 35 U.S.C. § 112**

*Claims 3 and 4 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

Applicants hereby amend claims 3 and 4 in order to cure the noted deficiencies.

Withdrawal of the rejection is hereby respectfully requested.

**Claim Rejections - 35 U.S.C. § 103**

*Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,456,796 issued to Gupta et al. (hereinafter Gupta).*

Claim 1 recites, in part, “biasing the substrate.” The Examiner acknowledges that Gupta fails to disclose this aspect of claim 1, but indicates that biasing a substrate is an extremely

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common mode of plasma processing. Therefore, the Examiner has taken Official Notice of the biasing the substrate, and alleges that it would have been obvious to one of ordinary skill in the art to envisage the claimed mode of plasma processing. Applicant respectfully disagrees.

In the instant rejection, the Examiner offers no evidence that it would be obvious for one of ordinary skill in the art to bias the substrate disclosed in Gupta. The Examiner simply notes that “it is likely that the skilled artisan would immediately envisage the claimed mode of plasma processing.” However, the Examiner has not provided any support for this conclusion. Simply because an element is known in the art does not indicate that the element may be combined with a separate reference. In an exemplary embodiment of the instant application, the substrate is biased in order to attract the formed plasma. Gupta, on the other hand, fails to disclose that the wafer should attract the formed plasma. Rather, Gupta discloses 1) that the formed plasma should be evacuated along with any sedimentary particles that have settled in the reaction chamber (i.e., the plasma is formed in order to clean the reaction chamber) (See generally, col. 4 of Gupta) or 2) that the formed plasma should be slowly brought up to the desired power level so as to not agitate any contaminants that may exist in the chamber. See generally, col. 5 of Gupta. However, one of ordinary skill in the art would not bias the wafer noted in Gupta, as biasing the substrate would likely increase the risk that contaminants would be attracted to the substrate along with the plasma in both the first and second instance. Thus, the Examiner has failed to provide a *prima facie* case of obviousness with regard to claim 1. Therefore, claim 1 is patentable over the applied art.

Claims 2-4 are patentable at least by virtue of their dependency from claim 1.

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**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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